



State of New Jersey

DEPARTMENT OF TRANSPORTATION

1035 PARKWAY AVENUE
TRENTON, NEW JERSEY 08625

IN REPLY PLEASE REFER TO

Soil Aggregates
Designations

Russell H. Mullen
~~XXXXXXXXXX~~
~~XXXXXXXXXX~~
Acting Commissioner

February 28, 1978

MEMORANDUM

All Design Units

Soil Aggregate Designations based upon the descriptions and gradations, as shown on the attached, shall be incorporated into the design requirements for all Projects.

The necessary provisions and amendments to 1961 Standard Specifications will be incorporated in a revised ADDENDA A which will be published and distributed by the Chief, Bureau of Special Engineering.

Nicolai D. Nicu
Chief, Bureau of Soils

Attachments

SOIL AGGREGATE TABLE USAGE DESCRIPTIONS OF
GRADATION DESIGNATIONS

Gradation
Designation

Description

- | | |
|-----|---|
| I-1 | A subbase material generally used as a top course sub-base beneath concrete pavements and primarily available in the area of New Jersey to the north and west of a straight line drawn from Trenton to Perth Amboy. |
| I-2 | A subbase material generally used as both a bottom course subbase beneath bituminous pavements or top course subbase beneath concrete pavements and primarily available in the area of New Jersey to the south and east of a straight line drawn from Trenton to Perth Amboy. |
| I-3 | A subbase material generally used as a bottom course subbase beneath subbase I-1 or beneath a dense graded aggregate base course and primarily used in the same area of New Jersey as mentioned in I-1. It can be found in soil deposits in most areas of New Jersey. |
| I-4 | A subbase material intended to combine both bottom course and top course into a single gradation for use beneath bituminous pavement. Its use is limited to selected conditions and areas. It is primarily available in the same area of New Jersey as I-2. |
| I-5 | A base course generally used between a bottom course subbase and bituminous courses to provide stability for paving equipment. It is primarily available south and east of a straight line drawn from Trenton to Perth Amboy. |
| I-6 | Soil aggregate for use in sand drains in Sand Drain type construction. |
| I-7 | Soil aggregate for use as a sand blanket drainage layer placed directly on meadow mat or soft silt deposits in "Sand Drain" or "Sand blanket" types of construction. |
| I-8 | Filter sand for use around porous concrete underdrain pipes to prevent infiltration of surrounding soils into pipe openings. |

Gradation
Designation

Description

- | | |
|------|--|
| I-9 | Used both as porous fill behind bridge abutments or walls and as an underwater backfill beneath bridge foundations. |
| I-10 | Used beneath bridge foundations and placed above the water level. |
| I-11 | Used as a general underwater backfill for areas which have been wet excavated. Also used for filling in depressions or channels in swamp or marsh areas prior to placing a sand blanket, and for a working table on top of the sand blanket in the "Sand Drain" or "Sand Blanket" types of construction. |
| I-12 | Material for general underwater or above water embankments which is hydraulically pumped directly into place in embankments. |
| I-13 | Material which is intended for use as a backfill of soft or unstable subgrades which have been undercut, and in some cases, replacement material for slope areas which have failed. |